

IN THE CLAIMS

Please cancel claims 5 and 13, without prejudice or disclaimer.

Please amend claims 1, 11, and 18 as follows:

1. (currently amended) Electric wire consisting of:  
a ~~conducting metal~~ core composed of copper and having a cylindrical wire shape and able to continually conduct a current longitudinally along the length of the cylindrical wire shape, the outer surface of ~~which is the copper core being~~ covered in a layer of alloy consisting of tin, antimony and copper through dipping in a bath of molten alloy consisting of tin, antimony and copper.

2. (previously presented) Wire according to claim 1 in which said alloy consists of: tin 74%-98.9%, antimony 1%-10% and copper 0.1%-10%, said quantities being expressed in weight.

3. (previously presented) Wire according to claim 2 in which said alloy consists of: tin 95%, antimony 4% and copper 1%, said quantities being expressed in weight.

Claims 4-6 (canceled).

7. (previously presented) Use of a wire according to claim 1 for the production of connection cables for low level signals, connection cables for power supply, printed circuit tracks and coupling, signal, pulse and power transformers, dipole, array and microstrip antennae, connectors for signals or power supply and for electromagnetic screens.

8. (previously presented) The wire of claim 1, wherein the wire is incorporated into a device selected from the group consisting of connection cables for low level signals, connection cables for power supply, printed circuit tracks, coupling transformers, signal transformers, pulse transformers, and power transformers, dipole antennae, array antennae, and microstrip antennae, and connectors for signals or power supply and for electromagnetic screens.

9. (previously presented) Power transformer for electric distribution network, the windings of which comprise the wire according to claim 1.

10. (previously presented) Transformer according to claim 7 including a dielectric sheath made of black silk, woven over the wire itself.

11. (currently amended) Electric wire consisting of:  
 a ~~conducting metal~~ core composed of copper and having a cylindrical wire shape and able to continually conduct a current longitudinally along the length of the cylindrical wire shape, the outer surface of ~~which is~~ the copper core being covered in a layer of alloy consisting of: tin 74%-98.9%, antimony 1%-10% and copper 0.1%-10%, the quantities of tin, antimony, and copper being expressed in weight, with the layer of alloy being formed on the conducting metal through dipping in and removal from a bath of molten alloy consisting of: tin 74%-98.9%, antimony 1%-10% and copper 0.1%-10%, the quantities of tin, antimony, and copper being expressed in weight.

12. (previously presented) Wire according to claim 11 in which the alloy consists of: tin 95%, antimony 4% and copper 1%, the quantities of tin, antimony, and copper being expressed in weight.

Claim 13 (canceled).

14. (previously presented) Use of a wire according to claim 11 for the production of connection cables for low level signals, connection cables for power supply, printed circuit tracks and coupling, signal, pulse and power transformers, dipole, array and microstrip antennae, connectors for signals or power supply and for electromagnetic screens.

15. (previously presented) The wire of claim 11, wherein the wire is incorporated into a device selected from the group consisting of connection cables for low level signals, connection cables for power supply, printed circuit tracks, coupling transformers, signal transformers, pulse transformers, and power transformers, dipole antennae, array antennae, and microstrip antennae, and connectors for signals or power supply and for electromagnetic screens.

16. (previously presented) Power transformer for electric distribution network, the windings of which comprise the wire according to claim 11.

17. (previously presented) Transformer according to claim 16 including a dielectric sheath made of black silk, woven over the wire itself.

18. (currently amended) A method for forming an electric wire, the method comprising the steps of:

providing a ~~conducting metal~~ core composed of copper and having a cylindrical wire shape and able to continually conduct a current longitudinally along the length of the cylindrical wire shape;

dipping the conducting metal into a bath of molten alloy consisting of: tin about 74% to about 98.9%, antimony about 1% to about 10%, and copper about 0.1% to about 10%, the quantities of tin, antimony, and copper being expressed in weight; and

removing the dipped conducting metal from the bath, thereby forming a layer of the alloy consisting of tin, antimony and copper on the outer surface of the ~~conducting metal~~ copper core to form the electric wire.

19. (previously presented) The method according to claim 18, wherein the alloy consists of: tin about 95%, antimony about 4%, and copper about 1%, the quantities of tin, antimony, and copper being expressed in weight.

20. (previously presented) The method according to claim 18, wherein the bath has a temperature between about 300°C and about 450°C.

21. (previously presented) The method according to claim 18, further comprising, before the step of dipping, the steps of:

passing the conducting metal through a flux; and

pre-heating the conducting metal to a temperature between about 60°C and about 90°C; and

wherein the step of dipping is performed for about three seconds.

22. (previously presented) The method according to claim 18, further comprising the step of:

forming the wire into a device selected from the group consisting of connection cables for low level signals, connection cables for power supply, printed circuit tracks and coupling, signal, pulse and power transformers, dipole, array and microstrip antennae, connectors for signals or power supply and for electromagnetic screens.